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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,324	12/15/2003	Rick A. Lawson	068341.0109	3731

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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT PAPER NUMBER

2636

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/736,324

Applicant(s)

LAWSON ET AL.

Examiner

Julie Lieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 19-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 19-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to Applicant's amendment filed December 15, 2004. Claims 1-10 and 19-31 have been amended. Claims 11-18 have been canceled. New claims 32-43 have been added. A terminal disclaimer has been received and approved.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Objections***

3. Claims 32- objected to because of the following informalities: In claim 32, last line, "battery" should read -- battery --. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. Claims 1-10 and 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda et al (US Patent No. 5,123,836) in view of Lamensdorf (US Patent No. 5,568,121).

#### **Claim 1:**

Yoneda discloses a system for acquiring and transmitting data between two or more fixed positions or locations relative to a detected condition and/or event in a plant, the system comprising the steps positioning or locating at least one detector (col. 21, 2<sup>nd</sup> and 3<sup>rd</sup> paragraph)

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in the plant to detect a condition or event at a plant position or location. The signals detected by the sensors are transmitted to a device for carrying a corrective action.

The reference fails to disclose using a battery powered RF transmitter in the plant in communications to the detector to transmit ID coded signal relative to the ID code, the detector, the battery to a central processing location. However, it would have been obvious to one skilled in the art, by the time the invention was made, to a wireless system to communicate a detector signal to a central processing system because such concept is old in the art as taught in Lamensdorf wherein detection signals are wirelessly communicated to a central monitoring location. Further, wireless communication would reduce the tedious wiring in the system which result in lower cost. Regarding the claimed transmitter being battery-powered, it would have been obvious to one skilled in the art use battery-powered transmitter because it would eliminate power cables to the transmitter, which in some cases is not convenient due to mounting location of the detector. In addition, wired and wireless transmitter devices are functionally equivalent.

Claim 2:

Yoneda further disclose positioning or locating at least one more detector and/or sensor to detect and/or sense a condition or event at a plant position or location.

Claim 3:

The combined system of Yoneda's and Lamensdorf further comprises positioning at least one transmitter in communication with said at least one more detector and/or sensor.

Claim 4:

The battery-powered transmitter taught in Lamensdorf is a spread spectrum transmitter.

Claim 5:

Lamensdorf fails to specify that the one battery-powered radio frequency transmitter is a 900 megahertz spread spectrum transmitter. Nevertheless, the use of 900 MHz transmitter is conventional the art. Thus, it would have been obvious to one skilled in the art by the time the invention was made to have readily recognized using spread spectrum transmitters in the system of Yoneda and Lamensdorf because it would minimize interference and increase reception quality.

Claim 6:

Though not disclosed in Yoneda or Lamensdorf, it would have been obvious to one skilled in the art to transmit the signal on predetermined time intervals because this would allow the detection result to be updated frequently. Also, by transmitting the signal on predetermined time intervals as opposed to continuously transmitting the signal, battery energy would be reserved.

Claim 7:

The combined system in Yoneda and Lamensdorf comprises at least one other RF transmitter.

Claim 8:

The at least one other transmitter in the combined system of Yoneda and Lamensdorf comprises a spread spectrum RF transmitter.

Claims 9 and 10:

Lamensdorf fails to specify that the one battery-powered radio frequency transmitter is a 900 megahertz spread spectrum transmitter. Nevertheless, the use of 900 MHz transmitter is conventional the art. Thus, it would have been obvious to one skilled in the art by the time the

invention was made to have readily recognized using spread spectrum transmitters in the system of Yoneda and Lamensdorf because it would minimize interference and increase reception quality.

Claim 19:

In Yoneda, at least one detector sensor (pressure sensor 101) is positioned in communication with a pipe in said plant.

Claim 20:

In Yoneda, at least one detector sensor (level sensor 105) is positioned in communication with a valve in said plant.

Claim 21:

In Yoneda, at least one detector sensor (pressure sensor 108) is positioned in communication with an enclosure in said plant.

Claim 22:

One of the detectors (sensor 103) in Yoneda detects a temperature.

Claim 23:

One of the detectors (sensor 101) in Yoneda detects pressure

Claim 23:

One of the detectors (sensor 105) in Yoneda detects a level.

Claim 26:

The combined system of Yoneda and Lamensdorf comprises at least a second detector in said plant, said second detector in communication with at least one battery-powered radio frequency spread spectrum transmitter, the second detector detecting temperature.

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Claims 27 and 29:

One of the detectors (sensor 104) in Yoneda detects emission (gas).

Claim 28:

No adsorption sensor is disclosed in Yoneda. However, it would have been obvious to one skilled in the art to use an adsorption sensor in the combined system of Yoneda and Lamensdorf as desired depending on its applicability.

Claims 30 and 31:

The level sensor 105 is position in communications with a valve and the pressure sensor 101 is position in communication with a pipe. One skilled in the art would have readily recognized that they would be positioned in communication with a pipe enclosure or a valve stuffing box enclosure if there were enclosures associated with the pipe of the valve.

5. Claims 32-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda et al (US Patent No. 5,123,836) in view of Lamensdorf (US Patent No. 5,568,121) and further in view of Martin et al. (US Patent No. 4,160,246).

Claim 32:

Lamensdorf fails to specify that the one battery-powered radio frequency transmitter is a 900 megahertz spread spectrum transmitter. Nevertheless, the use of 900 MHz transmitter is conventional the art. Thus, it would have been obvious to one skilled in the art by the time the invention was made to have readily recognized using spread spectrum transmitters in the system of Yoneda and Lamensdorf because it would minimize interference and increase reception quality. Though not disclosed in Yoneda or Lamensdorf, it would have been obvious to one

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skilled in the art to transmit the signal on predetermined time intervals because this would allow the detection result to be updated frequently. Also, by transmitting the signal on predetermined time intervals as opposed to continuously transmitting the signal, battery energy would be reserved.

Neither Yoneda nor Lamensdorf discloses transmitting a low battery condition. However, the concept of transmitting a low battery condition from a remote battery powered detector is old in the art as taught in Martin et al. (Col. 1, last paragraph). In light of this teaching, a skilled artisan would have readily recognized incorporating this concept into the combined system of Yoneda and Lamensdorf because it would insure the reliability of the device operation.

Claim 33:

Yoneda discloses a detector system for monitoring and/or detecting events and/or conditions in a plant, the system comprising a detector located at a fixed location in the plant, said detector operable when voltage is applied thereto and monitoring and/or detecting an event and/or a condition in the plant relating to an enclosure and/or an enclosed material in the plant. Yoneda further discloses the step of positioning or locating at least one more detector and/or sensor to detect and/or sense a condition or event at a plant position or location. In addition, this is a choice in design and the multiplication of part would not present an inventive step.

Yoneda discloses a system for acquiring and transmitting data between two or more fixed positions or locations relative to a detected condition and/or event in a plant, the system comprising the steps positioning or locating at least one detector (col. 21, 2<sup>nd</sup> and 3<sup>rd</sup> paragraph)



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in the plant to detect a condition or event at a plant position or location. The signals detected by the sensors are transmitted to a device for carrying a corrective action.

The reference fails to disclose using a battery powered RF transmitter in the plant in communications to the detector to transmit ID coded signal relative to the ID code, the detector, the battery to a central processing location. However, it would have been obvious to one skilled in the art, by the time the invention was made, to a wireless system to communicate a detector signal to a central processing system because such concept is old in the art as taught in Lamensdorf wherein detection signals are wirelessly communicated to a central monitoring location. Further, wireless communication would reduce the tedious wiring in the system which result in lower cost. Regarding the claimed transmitter being battery-powered, it would have been obvious to one skilled in the art use battery-powered transmitter because it would eliminate power cables to the transmitter, which in some cases is not convenient due to mounting location of the detector. In addition, wired and wireless transmitter devices are functionally equivalent.

Neither Yoneda nor Lamensdorf discloses transmitting a low battery condition. However, the concept of transmitting a low battery condition from a remote battery powered detector is old in the art as taught in Martin et al. (col. 1, last paragraph). In light of this teaching, a skilled artisan would have readily recognized incorporating this concept into the combined system of Yoneda and Lamensdorf because it would insure the reliability of the device operation.

Claim 34:

The monitored and/or detected event and/or condition in Yoneda relate to an enclosure and the enclosure is a pipe.

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Claim 35:

In Yoneda, the monitored and/or detected event and/or condition in Yoneda relate to an enclosure and the enclosure is a valve enclosure/stuffing box.

Claim 36:

The monitored and/or detected event and/or condition in Yoneda relates to an enclosure.

Claim 37:

The monitored and/or detected event or condition in Yoneda relates to an enclosed material.

Claim 38:

The enclosed material in Yoneda is a liquid and the detector 105 monitors and/or detects level.

Claim 39:

In Yoneda, the detector 101 monitors and/or detects pressure.

Claim 40:

In Yoneda, the detector 101 monitors and/or detects temperature.

Claim 41:

The detector in Yoneda monitors and/or detects more than one event and/or condition.

Claim 42:

The event and/or condition in Yoneda relate to an enclosure and the detector monitors and/or detects emissions from the enclosure.

Claim 43:

The detectors in Yoneda further monitors and/or detect temperature.

***Applicant's Remarks***

6. Applicant's arguments filed December 15, 04 have been fully considered but they are not persuasive.

The applicant has argued that the Yoneda system is hard-wired and the Lamensdorf system uses portable attendants, which is carried by a person, not at a fixed location as claimed in the present application, and has contended that the prima facie case of obviousness has not been established in the rejection.

***Response Applicant's Remarks***

Yoneda shows a system with wherein detectors and monitoring center are at fixed location and data is transmitted therebetween. Though the data transmission is performed through hard wired in Yoneda, it would have been obvious to one skilled in the art to use RF transmitters to communicate data for the reason stated in the rejection. The examiner submits that a prima facie case of obviousness is established when the teachings of the prior art would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. The combined teachings of the prior art need not provide an absolute prediction of success for the claimed subject matter. Instead, only a reasonable likelihood of success is required (In re Ball Corporation, 18 USPQ 2d 1491).

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

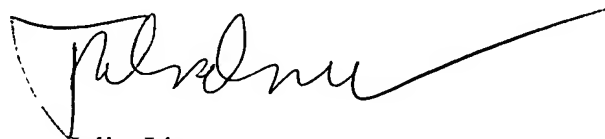
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long horizontal flourish extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2636

May 10, 05